

Louisiana Coastal Area (LCA) Small Diversion at Convent / Blind River





U.S. Army Corps of Engineers
New Orleans District



Louisiana Office of Coastal Protection and Restoration

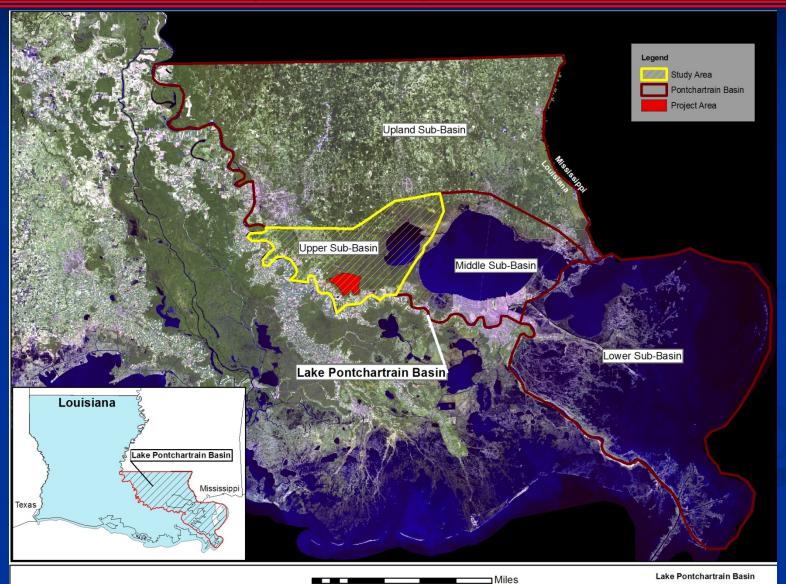
(WRDA 2007 Section 7006(e))

Feasibility Scoping Meeting
14 July 2009



Small Diversion at Convent / Blind River Study and Project Areas





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Small Diversion at Convent / Blind River Study Area Problems



The Blind River project is being planned to solve the problem of severe deterioration of the Maurepas Swamp.

Specific problems identified in the study area are:

- Tree mortality
- Exposure to stochastic risks
- Impacts to fish and wildlife species
- •High restoration costs and ineffectiveness
- •Vulnerability to hurricanes and conversion to open water areas



Small Diversion at Convent / Blind River Study Area Opportunities



- Enhance and improve water quality in the Blind River by increasing the flow of freshwater to the Blind River
- Enhance and improve flow in the Blind River by increasing the flow of freshwater to the Blind River
- Enhance and improve recreational opportunities in the Maurepas Swamp and Blind River



Small Diversion at Convent / Blind River Project Goal



Reverse the trend of degradation in the southeast portion of the Maurepas Swamp, so as to contribute towards achieving and sustaining a coastal ecosystem that can support and protect the environment, economy, and culture of southern Louisiana and thus contribute to the well-being of the Nation.



Small Diversion and Convent / Blind River *Planning Objectives*



- Reduce habitat conversion and future land loss
- Improve existing hydrology
- Introduce freshwater, nutrients, and sediment to swamps
- Promote water circulation to improve water quality
- Improve baldcypress/tupelo productivity
- Improve the habitat conditions for fish and wildlife
- Contribute to protecting vital socioeconomic resources



Small Diversion and Convent / Blind River Planning Constraints



- ■Do not adversely impact the MR&T flood control project
- ■Do not negatively impact authorized navigation projects
- ■Do not create or contribute to high dissolved oxygen
- ■Mississippi River Stage
- ■Mississippi River Nutrients
- ■Regulatory Water Quality Constraints (TMDL's)
- Louisiana Scenic River Designation for the Blind River
- ■The Maurepas Swamp Wildlife Management Area



Small Diversion and Convent / Blind River Initial Screening Results - Structural



Management Measure Type	Measures Initially Evaluated	Measures Carried Forward
Diversion System & Location	21	11
Transmission (Transfer) System	13	9
Distribution System within the Maurepas Swamp	11	10
Water Management Modifications in the Maurepas Swamp	14	12
Water Quality Management	7	6
Sediment Management	4	0
Total	70	48



Small Diversion and Convent / Blind River Initial Screening Results – Non-Structural



Management Measure Type	Measures Initially Evaluated	Measures Carried Forward
Water Quality Management	3	1
Sediment Management	1	0
Vegetation Management	5	1
Recreational Access and Enhancements	6	1
Real Estate (purchase and preservation)	8	1
Monitoring	1	0
Total	24	4



Small Diversion and Convent / Blind River *Alternative Plan Strategies*



- No action (Plan Strategy A)
- Restoration to Pre-anthropogenic influences (Screened out as infeasible and prohibitively expensive)
- Maintain the existing condition of the Swamp (No net loss)(Plan Strategy B)
- Rehabilitate and improve the Swamp (Plan Strategy C)



Small Diversion and Convent / Blind River Initial Array of 13 Alternatives

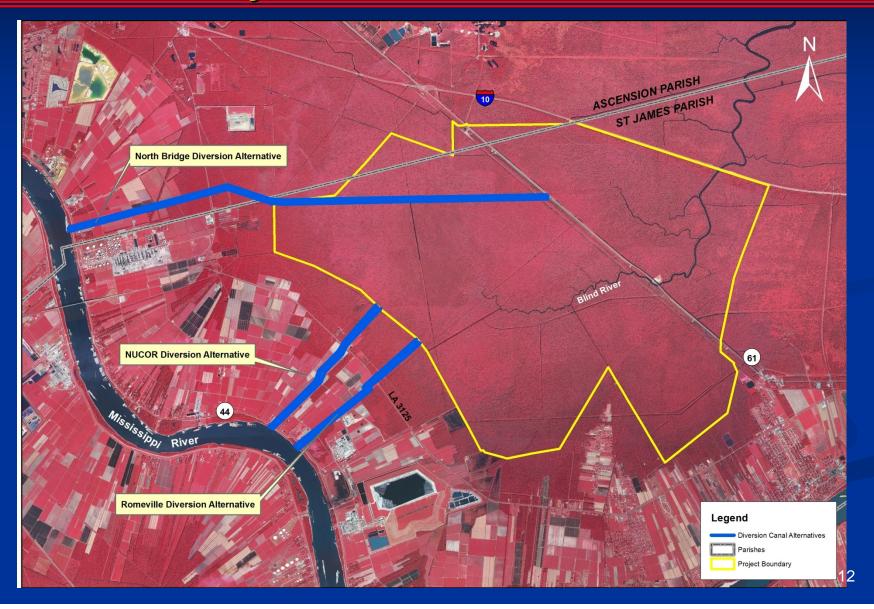


- 13 Alternatives were developed by the Project Delivery Team from a variety of measures.
- Alternatives were screened out based on consistency with project goals; effectiveness in contributing to planning objectives; unavoidable cultural resources and cost effectiveness between similar measures.
- •Final alternatives include: No Action and 5 Alternatives.



Small Diversion and Convent / Blind River *Project Area Determination*







Small Diversion and Convent / Blind River Work to Complete Study



- Aerial photogrammetry
- Bathymetric surveys
- Water stage/velocity and quality monitor
- Cultural Resource reconnaissance survey
- Hydraulic models
- Cost Estimating
- Preliminary engineering
- Environmental field surveys
- IWR-Plan model
- Ground surveying
- Geotechnical field work
- Preliminary site plan layout



Small Diversion and Convent / Blind River



Thank You